AMENDMENTS TO THE DRAWINGS

The attached “Replacement Sheet” of drawings includes changes to Figure 2. The attached “Replacement Sheet,” which includes Figure 2, replaces the original sheet including Figure 2.

Attachment: Replacement Sheet

REMARKS

Claims 1-22 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

DRAWINGS

The drawings stand objected to for certain informalities. The Applicant has attached revised drawings for the Examiner's approval. The "Replacement Sheet" Figure 2, has been amended to correct an error. More specifically, an arrow from block 120 has been moved from the block 122 to End. The corrected Figure 2 is supported by paragraph [0025] as filed.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 9, and 10 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Rayl et al. (U.S. Pat. No. 6,782,865). This rejection is respectfully traversed.

With respect to claim 1, Rayl fails to teach or suggest an engine control system that controls transitions between activated and deactivated modes in a displacement on demand engine and that includes an engine speed sensor that generates an engine speed signal, and a controller that calculates a torque reserve based on the engine speed signal.

The diagnostic system of the present invention controls the transition between activated and deactivated modes of the engine based on a torque reserve (T_{Res}). The T_{Res} is calculated based on the difference between $T_{MAXcorr}$ and $T_{BRAKEdes}$. More specifically, the $T_{MAXcorr}$ and $T_{BRAKEdes}$ are determined based on an engine speed signal.

Rayl et al. '865 discloses an engine control system for controlling transitions between activated and deactivated modes in a displacement on demand engine based on T_{Res}. More specifically T_{Res} is estimated using vacuum pressure determined by subtracting engine manifold pressure from the barometric pressure (Col.1, Lines 57-64). Therefore, Rayl et al. '865 fails to teach or suggest a controller that calculates a torque reserve based on an engine speed signal.

Claim 9 has been amended herein to include determining a torque reserve based on an engine speed signal. As discussed in detail above, Rayl et al. ‘865 suggests a method for controlling transitions between activated and deactivated modes, in a displacement on demand engine, based on vacuum pressure.

Claim 10 is dependent upon Claim 9 and is therefore allowable for at least similar reasons.

ALLOWABLE SUBJECT MATTER

Claims 17-22 were allowed.

The Examiner states that claims 2-8 and 11-16 would be allowable if rewritten in independent form. Applicants have presently refrained from rewriting any other claims in view of the discussion above. Therefore, claims 2-8 and 11-16 should now be in condition for allowance.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (313) 665-4969. If for some reason a fee needs to be paid as well as one-month extension please charge Deposit Account No. 07-0960 for the fees, which may be due.

Respectfully submitted,

Dated: 4-13-05

By: ______________________
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